## **Index File**

## **Application No. UP-701-06**

## Richmond MHz, LLC d.b.a. NTELOS

**Application No. UP-701-06** is a request for a Special Use Permit to authorize the establishment of a telecommunications tower up to 172 feet in height on the Magruder Elementary School campus located at 700 Penniman Road.

The staff is recommending approval.

### Attachments:

- 1. Staff report
- 2. Zoning map
- 3. Aerial photo
- 3. Sketch plan (4 pg)
- 4. Applicant's narrative (2 pg)
- 5. Photo simulations (3 pg)
- 6. Tower Visibility Analysis (4 pg)
- 7. Propagation maps (3 pg)
- 8. Proposed Resolution No. PC06-14

# COUNTY OF YORK MEMORANDUM

**DATE:** June 7, 2006 (PC Mtg. 6/14/06)

**TO:** York County Planning Commission

**FROM:** Timothy C. Cross, AICP, Principal Planner

**SUBJECT:** Application No. UP-701-06, Richmond MHz, LLC d.b.a. NTELOS

### **ISSUE**

This application requests a Special Use Permit, pursuant to Section 24.1-306 of the York County Zoning Ordinance (Category 17, No. 7), to authorize the establishment of a telecommunications tower up to 172' in height on the Magruder Elementary School campus located at 700 Penniman Road (Route 641) in the northeast quadrant of the intersection of Penniman Road and Merrimac Trail (Route 143) and is further identified as Assessor's Parcel No. 10-14-A.

### **DESCRIPTION**

- <u>Property Owner:</u> York County School Board
- Location: 700 Penniman Road (Route 641)
- Area: 13.2 acres
- <u>Frontage</u>: Approximately 750 feet on Penniman Road, 555 feet on Merrimac Trail (Route 143), and 510 feet on Hubbard Lane (Route 716)
- Utilities: Public water and sewer
- <u>Topography:</u> Mostly flat with some steep slopes along the northern property boundary
- 2025 Land Use Map Designation: General Business
- Zoning Classification: RC-Resource Conservation
- Existing Development: Magruder Elementary School
- Surrounding Development:

North: Used car storage lot, American Sentry self-storage, James-York Playhouse

East: Single-family detached homes (across Hubbard Lane)

South: Meineke Car Care Center and single-family detached homes in James City County (across Penniman Road)

West: WaWa convenience store/gas station (under construction)

York County Planning Commission June 7, 2006 Page 2

• <u>Proposed Development:</u> 172' telecommunications tower (165' tower with a 7' lightning rod) with associated ground-mounted equipment

### CONSIDERATIONS/CONCLUSIONS

- 1. In an effort to expand its coverage and eliminate major gaps in wireless voice and data services in residential areas of the upper County and the greater Williamsburg area, NTELOS wishes to construct a 172-foot telecommunications tower (including a 7-foot lightning rod) at the Magruder Elementary School campus located at the intersection of Merrimac Trail and Penniman Road. The proposed tower site would be in the right field area of the school's softball field approximately 400 feet west of Hubbard Lane, 675 feet north of Penniman Road, and 710 feet east of Merrimac Trail. This area is designated for General Business in the Comprehensive Plan and, like most County school sites, is zoned RC (Resource Conservation).
- 2. The County's policies regarding the siting of telecommunications towers are spelled out in the Comprehensive Plan, which states that new towers should be permitted "only where a proven need exists and only when all other opportunities, such as colocation on an existing tower or utilization of other existing structures have been exhausted." Accordingly, the applicant explored co-location opportunities, the only available space being on an existing Colonial Williamsburg Foundation tower located too far to the south and not high enough to meet NTELOS' needs. At the suggestion of staff, the applicant also contacted the City of Williamsburg to inquire about utilizing the city's water tank located approximately 330 feet north of the school property; however, the city has not been responsive to these inquiries and does not appear to be interested. (It should be noted that the visual benefits of locating on the water tank would be limited since the proposed tower height greatly exceeds the height of the water tank.) There are no other tall structures in the applicant's search ring, and the Dominion Virginia Power transmission structures to the north (which are located within residential subdivisions) are not structurally capable of supporting the equipment.

The <u>Comprehensive Plan</u> also states that the County should "[d]iscourage or prohibit telecommunications towers in historic or residential areas except where no other practical option exists." Magruder Elementary School is located along a major commercial corridor and not in a residential area; however, it abuts large residential areas to the east across Hubbard Lane and to the south across Penniman Road in James City County. Furthermore, although not located in a historic area, a major entry into the Williamsburg area (albeit one that is not in the Tourist Corridor Management overlay district and therefore not subject to special requirements of that district that are intended to protect the aesthetic and visual character of transportation corridors leading into and through the designated historic districts of Williamsburg and Yorktown).

3. The applicant has worked with County and School Division staff to identify the optimal location and design for the proposed tower. Several alternative locations on the school property were considered and evaluated, and the right field location next to the basketball courts was selected because of a) its distance from Merrimac Trail, b) sur-

York County Planning Commission June 7, 2006 Page 3

rounding tree cover that further obscures views not just from Merrimac Trail but from residential areas to the north and northeast, c) ease and safety of access for maintenance trucks, and d) compliance with County setback requirements. Furthermore, as requested by staff in order to reduce the visibility of the tower, the applicant proposes to use a pole with concealed antennas (known as a "slick stick").

In order for the Commission, Board of Supervisors, and staff to evaluate the visibility of the proposed tower from nearby residential areas and major corridors, particularly Merrimac Trail, the applicant has submitted photo simulations of the proposed tower. In addition, a balloon test and a crane test were taken at alternative locations on the subject parcel, providing additional evidence of the potential visual impacts of the tower. The tower would, of course, be visible from residential properties across Hubbard Lane and Penniman Road but generally not from the interior of these neighborhoods. Dense vegetation in the areas to the north of the school property, behind and adjacent to James York Plaza, and along Merrimac Trail south of Penniman Road provides significant screening from surrounding areas. Visibility of the proposed tower would be further reduced by the use of internal antennas rather than the typical external antenna arrays.

- 4. The proposed tower would be a co-location site designed to accommodate a total of three wireless communications providers. Ground-mounted equipment at the base of the tower would be located within a 2,338-square foot lease area surrounded by a six-foot (6') fence beyond the existing outfield fence. Vehicular access to this gated compound area would be via a twelve-foot (12') access road paved with a grassy paver system (similar to the existing tower at Waller Mill Elementary School), which would connect with an existing parking area and asphalt road located behind the school and extending to Hubbard Lane. As with other towers on school sites, the compound would be covered with green netting to prevent softballs, baseballs, etc. from falling into the compound.
- 5. The Federal Aviation Administration (FAA) will analyze the proposed tower to ensure that it will not infringe on air traffic flight patterns. If the FAA requires a permit for the construction of the tower, the applicant will need to provide evidence of FAA approval prior to the County's final approval for construction of the tower. A condition to this effect is included as part of the approving resolution.
- 6. As a condition of approval, the applicant will be required to submit a statement from a registered engineer certifying that NIER (non-ionizing electromagnetic radiation) emitted from the tower will not result in a ground level exposure at any point outside such facility that exceeds the maximum applicable exposure standards established by any regulatory agency of the federal government or the American National Standards Institute.
- 7. Although the Federal Telecommunications Act of 1996 did not preempt local zoning authority, localities are somewhat constrained in their ability to deny or delay requests for towers. Such decisions may be enjoined or overturned by the FCC or federal courts if the intent or the effect of the decision is to discriminate between types of

York County Planning Commission June 7, 2006 Page 4

communications service providers. They can also be overturned if the decision is not reached within a reasonable period of time, if the denial is unreasonable, or if the denial is based on public health concerns relating to radio frequency emissions. In addition, the Act places an obligation upon localities to assist the telecommunications providers in finding a facility somewhere within the footprint (coverage area).

### **RECOMMENDATION**

Although located along a major commercial corridor, the proposed tower will not be visually obtrusive, in staff's opinion, because of its deep setback, the dense vegetation in the surrounding area, and the absence of external antenna arrays. Staff believes this proposal is consistent with the policies set forth in the <u>Comprehensive Plan</u> with regard to telecommunications towers. Therefore, based on the considerations and conclusions as noted, staff recommends that the Commission forward this application to the Board of Supervisors with a recommendation of approval subject to the conditions set forth in proposed Resolution No. PC06-14.

### **TCC**

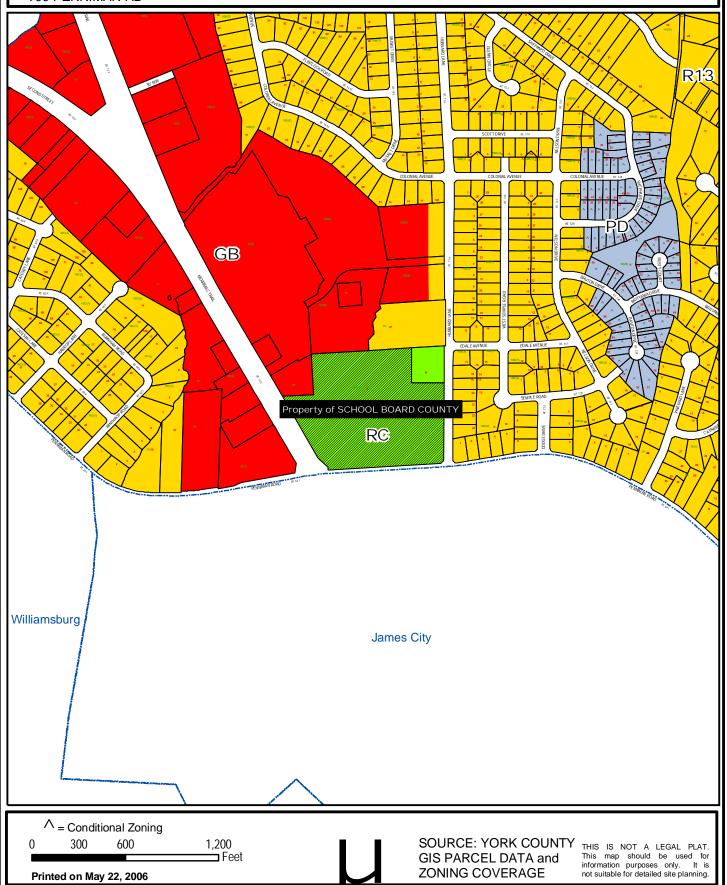
### Attachments

- Zoning Map
- Aerial Photo
- Sketch Plan
- Applicant's narrative
- Photo simulations
- Tower Visibility Analysis
- Propagation maps
- Photo simulations of proposed tower
- Proposed Resolution No. PC06-14

## **APPLICANT** Richmond 20mhz, Llc Dba Ntelos

**ZONING MAP** 

172' telecommunications tower 700 PENNIMAN RD APPLICATION NUMBER:\_\_\_UP-701-06





## Magruder Elementary School - Aerial Photo



GEOGRAPHIC INFORMATION SYSTEMS Division of Computer Support Services Department of Financial & Management Services WWW.YORKCOUNTY.GOV

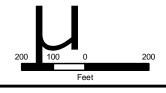
Image Copyright 2005. VARGIS, LLC. Herndon, VA. All Rights Reserved.

HORIZONTAL ACCURACY: +/- 2.5 feet VERTICAL ACCURACY: +/- 1 foot DATUM: VA State Plane South, NAD 83 DATUM: NVAD 1929

This map should NOT be used for engineering or other design purposes without full verification having been undertaken by a qualified surveyor.

The County of York, Virginia assumes no responsibility for the accuracy of this map or the information contained herein or derived here from. The buyer and/or user assumes all risks and liabilities whatsoever resulting from, or arising out of the use of this map.

There are no oral agreements or warranties relating to the sale and/or use of this map.



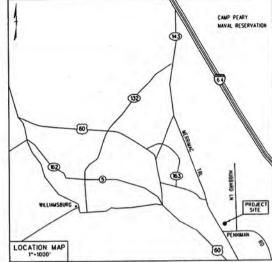
THIS IS NOT A LEGAL PLAT.
This map should be used for information purposes. It is not suitable for detailed site planning.

Flood Information Courtesy of: Federal Emergency Management Agency (FEMA) This flood data has not been certified.

#### GENERAL NOTES

- 1. PROPERTY OWNER: YORK COUNTY SCHOOL BOARD 102 DARE ROAD 202 DARE ROAD 402 YORKTOWN, VA 23692
- ATTN: RICHARD HICKSON

  2. SITE ADDRESS: MAGRUDER ELEMENTARY SCHOOL
  700 PENNIMAN RD
  YORKTOWN, VA 23185
- JOHNSON, MIRMIRAN & THOMPSON
  9201 ARBORETUM PARKWAY
  SUITE 140
  RICHMOND, VA 23236
  PHONE: (804) 323-9900 FAX: (804) 323-0596
- 4. APPLICANT: NTELOS
  901 ARBORETUM PARKWAY, SUITE 295
  RICHHOMD VA 23236
  CONTACT PERSON: BEN PIERCE
  (804) 218-5476
- 5. LEASE AREA: 7827 SO. FT. NTELOS SITE NO.: RMB-5421 (MAGRUDER SCHOOL)
- 6. CURRENT ZONING: RC
- THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS FOR THIS PROJECT FROM ALL APPLICABLE GOVERNMENT AGENCIES.
- B. ANY PERMITS WHICH MUST BE OBTAINED SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND AT HIS EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
- THE CONTRACTOR SHALL NOTIFY THE COUNTY ENGINEER 24 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- 10. LOCATION OF EXISTING SEWER, WATER OR GAS LINES, COMDUITS OR OTHER STRUCTURES ACROSS, LINESRATING OR OTHERWISE, ALONG THE LINE OF PROPOSED WORK ARE NOT NECESSARILY SHOWN ON THE PLANS, AND IF SHOWN ARE OBLY APPROXIMATELY CORRECT, CONTRACTOR SHALL VERRY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES (HICLUDING TEST PITS BY HAND IF NECESSARY) IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK, CONTACT ENGINEER IMMEDIATELY IF LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON PLANS, IF THERE APPLARS TO BE A COMPILED, OR UPON THE DISCOVERY OF ANY UTILITY NOT SHOWN ON THE PLANS, FOR ASSISTANCE CALL "MISS UTILITY".
- 11. EXISTING PAVEMENT AND OTHER SURFACES DISTURBED BY THE CONTRACTOR (WHICH ARE NOT TO BE REMOVED) SHALL BE REPAIRED TO LIKE-NEW CONDITION.
- 12. THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL DITCHES, PIPES, AND OTHER DRAINAGE STRUCTURES FREE FROM DESTRUCTION UNTIL WORK IS ACCEPTED BY THE OWNER, THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY FALURE TO MAINTAIN DRAINAGE STRUCTURES IN OPERABLE CONDITION.
- 13. THE CONTRACTOR SHALL COORDINATE WITH NTELOS THE REQUIREMENTS FOR AND LIMITS OF OVERHEAD AND/OR UNDERGROUND ELECTRICAL SERVICE.
- ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTEED FOR ONE (1) FULL YEAR FROM THE DATE OF ACCEPTANCE.
- 15. THE OWNER SHALL HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED, A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY COUNTY INSPECTORS.
- 17- ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERENCE IN PERFORMANCE OF WORK SMMLAR TO THAT DESCRIBED HERBIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING THAT HE DOSE HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED AND PROPERLY REGISTERED TO DO THIS WORK IN THE STATE IN WHICH IT IS TO BE PERFORMED.
- UNLESS SHOWN OR NOTED OTHERWISE ON THE CONTRACT DRAWINGS, OR IN THE SPECIFICATIONS, THE FOLLOWING NOTES SHALL APPLY TO THE MATERIALS. LISTED HEREIN, AND TO THE PROCEDURES TO BE USED ON THIS PROJECT.
- ALL HARDWARE ASSEMBLY MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERCEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.



HEAD EAST ON 1-64 TOWARDS NORFOLK, TAKE EXIT 238 TO VA-143. HEAD EAST ON VA-143/HERRMACTRAL TOWARDS WILLIARSBURG FOR 2.7 MLES. TURN LEFT ONTO PERMANA ROAD, TURN LEFT ONTO HABRARD LARE, TURN LEFT INTO SCHOOL ENTRANCE, TOWER SITE IS LOCATED BEHAD THE ATHLETIC PELDS AT THE SEACK OF THE SCHOOL.



TELECOMMUNICATIONS FACILITY
MAGRUDER SCHOOL (RMB-5421)
700 PENNIMAN RD
YORKTOWN
VA 23185

- 20. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SCOURCE OF INSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION AND/OR FELD MODERCATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATER TEMPORARY BRACING, CUT'S OR THE DOWNS THAT MAY BE MECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.
- 21. ALL DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS SHOWN ON THE DRAWNING SMALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE GENERAL SMALL MAY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK OIL THAS PROJECT ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNERS AND THE OWNERS ENGINEER. THE DISCREPANCIES WIST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK. THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNOUSES, SCOULNCES, AND PROCEDURES, OSSERVATION VISITS TO THE SITE BY THE OWNER AND/OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR
- 22. ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD WORKING UNLITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND THE ENGINEER PRIOR TO INSTALLATION, THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
- 23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT THIS PROJECT AND RELATED WORK COMPLES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS COVERNING THIS WORK.
- 24. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST EDITION OF THE LOCAL BUILDING CODE.
- ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS, WITH THE RESIDENT LEASING ACENT FOR APPROVAL.
- ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL CODES OR OBDINANCES. THE MOST STRINGENT CODE WILL APPLY IN THE CASE OF DISCREPANCES OR DIFFERENCES IN THE CODE REQUIREMENTS.
- 27. ANY DAMAGE TO ADJACENT PROPERTIES WILL BE CORRECTED AT THE CONTRACTORS EXPENSE.
- 28. CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.
- 29. RECORD DRAWINGS: MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS BETWEEN WORK AS SPECIFED AND INSTALLED RECORD CHANGES ON A CLEAN SET OF CONTRACT DRAWINGS WHICH SHALL BE TURNED OVER TO THE CONSTRUCTION MARAGER UPON COMPLETION OF PROJECT.
- 30. COORDINATE THE CONSTRUCTION STAGING AREA WITH THE PROPERTY DWNER AND THE PROPERTY MANAGER WELL IN ADVANCE OF THE CONSTRUCTION START DATE.
- CONTRACTOR IS TO FIELD VERIFY ALL EXISTING CONDITIONS AND PLAN DIMENSIONS, AND NOTIFY THE ARCHITECT AND ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
- 32. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE WORK SITE ON

DEV	ne.	SHEETS	

SHEET NO.

TITLE SHEET AND GENERAL NOTES

C-2 COMPOUND PLAN
C-3 TOWER ELEVATION AND ACCESS ROAD DETAILS

RECEIVED

JUN 6 2006

YORK COUNTY PLANNING DIVISION



JOHNSON, MIRMINAN & THOMPSON Busineering A Englater Philure 9201 A too et uin Per hary Sulte 40 Richmond, Virginia 23:236 Phone (804) 323-9900 Fax (804) 323-9596







SUBMITT ALS

MO. DATE ISSUE

PROJECT NAME

TELECOMMUNICATIONS
FACILITY
MAGRUDER SCHOOL
(RMB-542)
700 PENNIMAN RD
YORKTOWN
VA 23/85

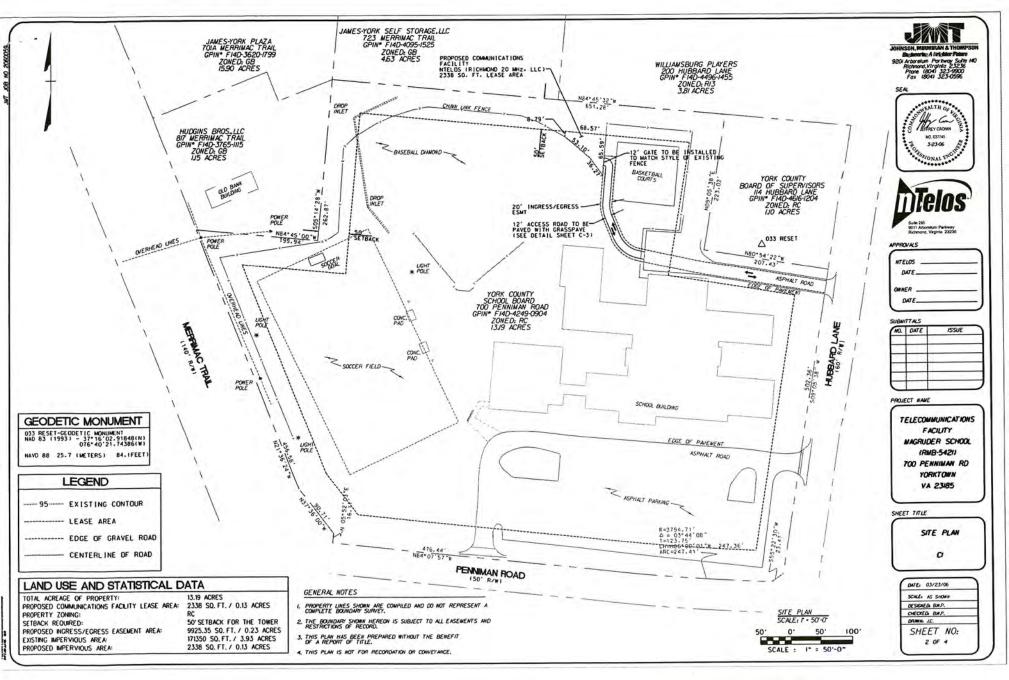
TITLE SHEET
AND
GENERAL NOTES

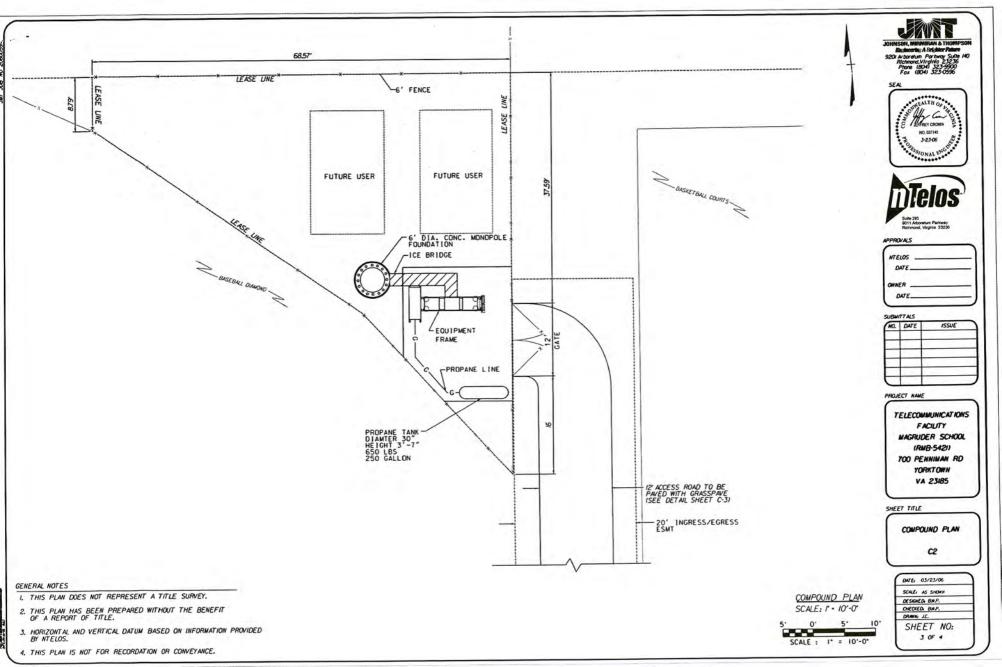
T-1

DATE 03/23/06

SCALE AS SHOWN
DESCRED BUP.
DIECED BUP.
DIWIN JE.

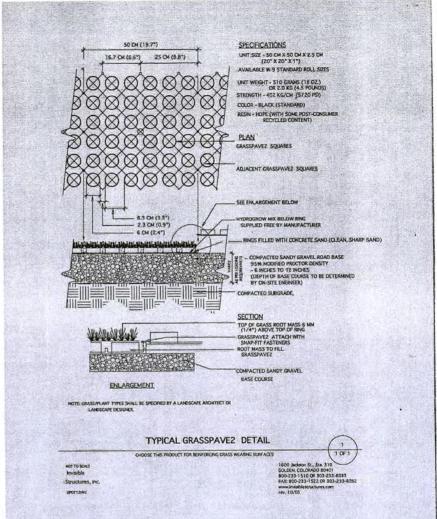
SHEET NO:
1 OF 4





NOIL: THE STRUCTURE SHOWN IS SCHEMATIC IN NATURE ONLY THE CONTRACTOR SHALL COORDINATE WITH THE CM FOR ANTENNA MOUNTS AND COAXIAL CABLE SUPPORT MEANS RAD CENTER OF NTELOS (RICHMOND 20MHZ+ LLC) ANTENNAS @ 165' AGL FUTURE USER @ 155' AGL FUTURE USER @ 145' AGL ANTENNAS INSTALLED-INSIDE MONPOLE MONOPOLE-TOWER COMPOUND TO BE COVERED WITH APPROVED NETTING ICE BRIDGE NTELOS EQUIPMENT PLATFORM GRADE LEVEL ELEVATION VIEW SCALE: NOT TO SCALE SITE SPECIFIC INSTRUCTIONS:

- I. CONTRACTOR SHALL VISIT THE SITE BEFORE BIDDING ON THE WORK CONTAINED IN THE PACKAGE
- 2. FOR ADDITIONAL INFORMATION REFER TO THE GENERAL NOTES ON SHEET 5 OF 5.
- 3. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL KNOWN AND/OR SUSPECTED UTILITIES BURIED UNDERGROUND.PRIOR TO EXCAVATING IN THE VICINITY . CONTRACTOR SHALL EXERCISE CARE DURING EXCAVATION.SO AS TO AVOID DAMAGE TO EXISTING UTILITIES OR UNDERGROUND FACILITIES.
- 4. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS AND LOCATION OF TOWER AND NEW EQUIPMANT, AND INFORM INTELOS'S REPRESENTATIVE OF ANY CONFUCTS OR DISCREPENSIES BEFORE PROCEEDING WITH CONSTRUCTION.



JOHNSON, MIRORISMA E HOME-SUM Beglacering A Brighter Palare 920i Arboratum Porknoy Sufte MO Richmond, Virginia 23236 Ptone (804) 323-9590 Fox (804) 323-9596

SEAL





APPROVALS

NTELOS \_\_\_\_\_

OWNER \_\_\_\_

SUBMITTALS

MO.	DATE	ISSUE
$\overline{}$		

PROJECT NAME

TELECOMMUNICATIONS
FACILITY
MAGRUDER SCHOOL
(RMB-5421)
700 PENNIMAN RD
YORKTOWN

VA 23/85

SHEET TITLE

TOWER ELEVATION
AND
ACESS ROAD DETAILS
C3

DATE: 03/23/06

SCALE: AS SHOWN

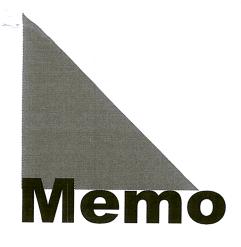
DESIGNED: BINF.

CHECKED: BINF.

SHEET NO:

DRAWN, JC.

4 OF 4





To: Tim Cross, Principal Planner, York County

From: Marc Cornell

CC: Vernon Geddy

Date: 5/24/2006

Re: Proposed Magruder School Tower Site Justification

### Tim.

NTELOS currently provides PCS wireless services in York County from communications sites developed at various times beginning in 1996. The NTELOS network was originally developed to provide vehicular level services, concentrating on the Route 17 and Route 177 (Victory Boulevard) corridors. Recently, NTELOS has targeted improvements to its wireless services on the peninsula in residential areas as a response to evolving and increasing customer demand for wireless voice and data services. Submitted with the application for the proposed Magruder School communications site are propagation plots which clearly show major gaps in coverage in the western areas of the County near Williamsburg. Additionally, as more and more people migrate from wired telephone service to wireless, the spacing of the existing sites cannot provide the reliable in-building communications services customers expect.

Over the last six months NTELOS has evaluated every existing structure in and outside an area where a new facility could be installed to fill in one of several major coverage gaps in the NTELOS York County network. We have also evaluated other properties for the construction of a new pole and facility. Based on an exhaustive review of the area and after evaluating all of the potential options, NTELOS entered into an agreement with York Schools for the Magruder location. We believe this is the best location for a number of factors:

 The Magruder School location is the best available location to fit into the existing NTELOS grid, including the anticipated activation of the Waller Mill School site later this year. The neighboring NTELOS communications sites are located at Exits 242 and 238 on I-64 to the east, at the James City County Government Center to the south and the new Waller Mill site to the northwest.

Regional Office:

9011 Arboretum Parkway, Suite 295 Richmond, Virginia 23236 Phone: (804) 327-5300 Fax: (804) 327-5491

RECEIVED

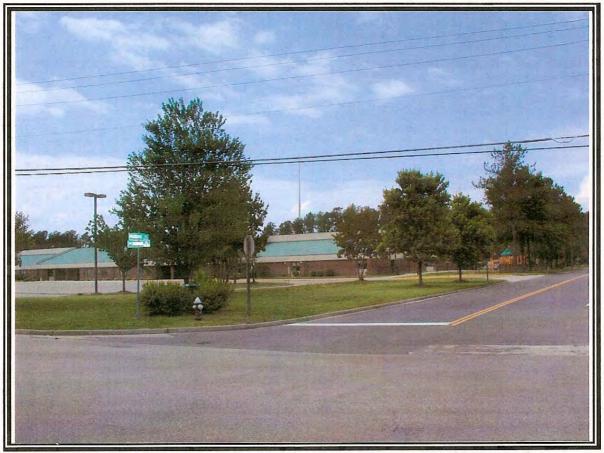
MAY 2 5 2006

- The Magruder School site is located very near a City of Williamsburg owned water tank, an existing tall visual element, which has a screening effect on the proposed monopole from some viewing angles.
- Existing tree buffers on the school property, as well as the mature tree growth in the
  residential neighborhoods to the east and south, will effectively screen views of the
  structure from all homes except those immediately across Penniman Road and
  Hubbard Lane from Magruder School.
- Finally, York County Schools will receive a considerable revenue stream for use of the school site, not only from NTELOS, but from any future carriers collocating on the proposed site.

## Alternate locations evaluated by NTELOS include:

- The City of Williamsburg water tank located behind James York Shopping Center. As
  of this date, the City has been unresponsive to our inquiries. Based on this and the
  fact that no other wireless companies are operating on the tank, we have come to the
  conclusion that the City is not interested in permitting communications equipment on
  this water tank.
- An existing tower owned by Colonial Williamsburg Foundations at their operations center on 5<sup>th</sup> Ave. Due to the low available elevation and its locations too far south, this site would be unable to provide connecting coverage to the Waller Mill site.
- Dominion Virginia Power transmission structures located between three-quarters to one and one quarter mile north of Magruder School. These structures failed structural analysis and are unable to support any communications equipment.
- We looked at replacing the tower located behind Fire Station #3 on Hubbard lane, but there is no available ground space for the ground equipment.
- NTELOS also attempted to find alternate ground sites for the construction of a new monopole. The only location with enough ground space available is the Holiday car dealership at 543 Second Street. They rejected a proposal to lease space at both this location and another property adjacent to Magruder School on Merrimac Trail.

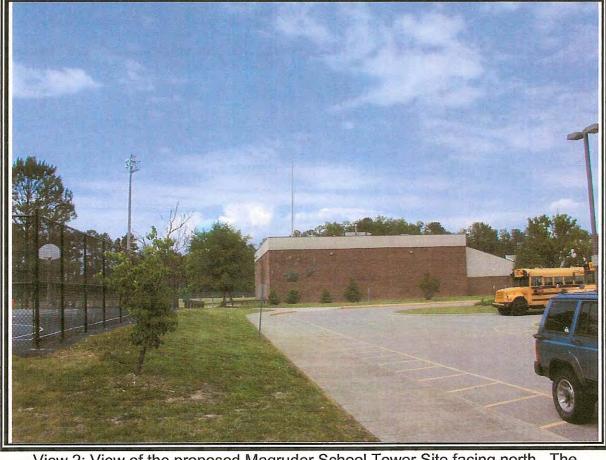
The Magruder School location represents the best opportunity for NTELOS to improve communications services to the residential communities located between Route 143 and I-64 while minimizing the visual impacts to those communities by placing the structure close to a commercial district.



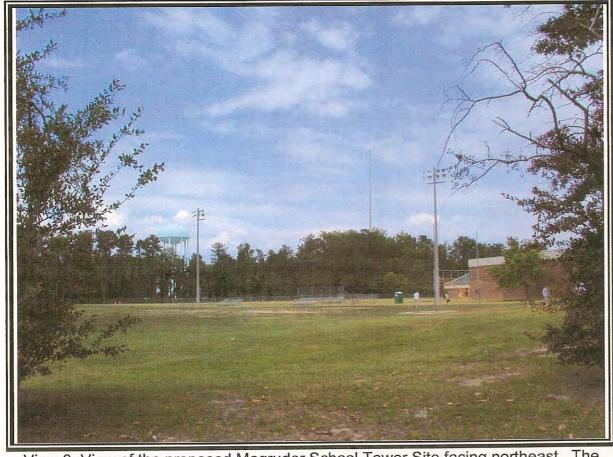
View 1: View of the proposed Magruder School Tower Site facing northwest.

The photograph is taken from the intersection of Penniman Road and Hubbard

Lane



View 2: View of the proposed Magruder School Tower Site facing north. The photograph is taken from the Magruder Elementary School Parking lot.



View 3: View of the proposed Magruder School Tower Site facing northeast. The photograph is taken from the Magruder School athletic fields adjacent to Merrimac Trail (Rt. 143)

## **Tower Visibility Analysis**



The balloon test site was approximately 370 feet west of the proposed tower site. The crane test site was approximately 460 feet southeast of the proposed tower site.



View of crane from Hubbard Lane

## **Tower Visibility Analysis (continued)**



View of crane from Hudgins used car storage lot



View of crane from eastbound Merrimac Trail

## **Tower Visibility Analysis (continued)**



View of crane from Hubbard Lane/Edale Ave. intersection



View of balloon from Hubbard Lane

## **Tower Visibility Analysis (continued)**

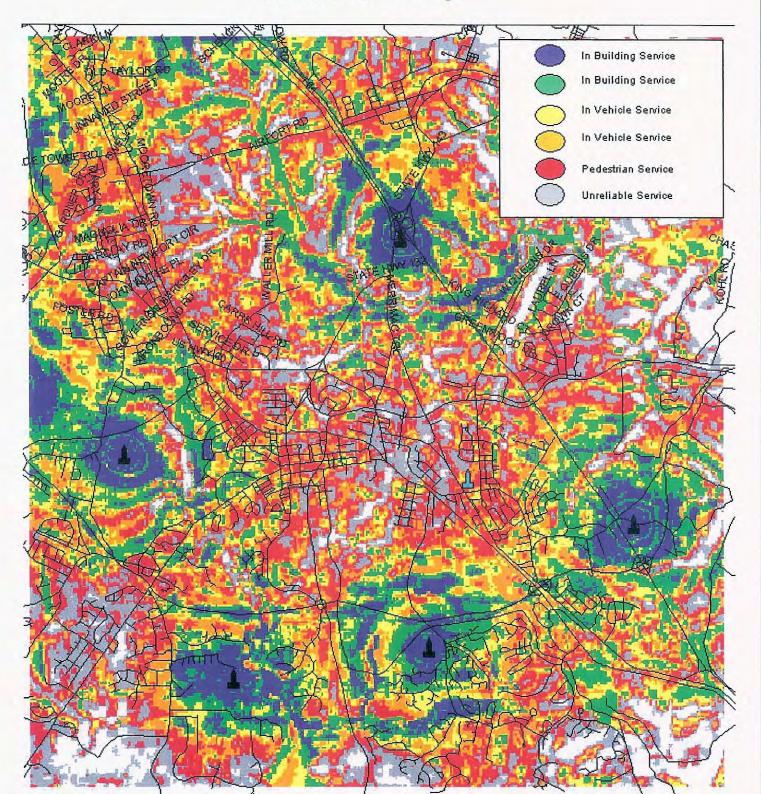


View of balloon from Penniman Road

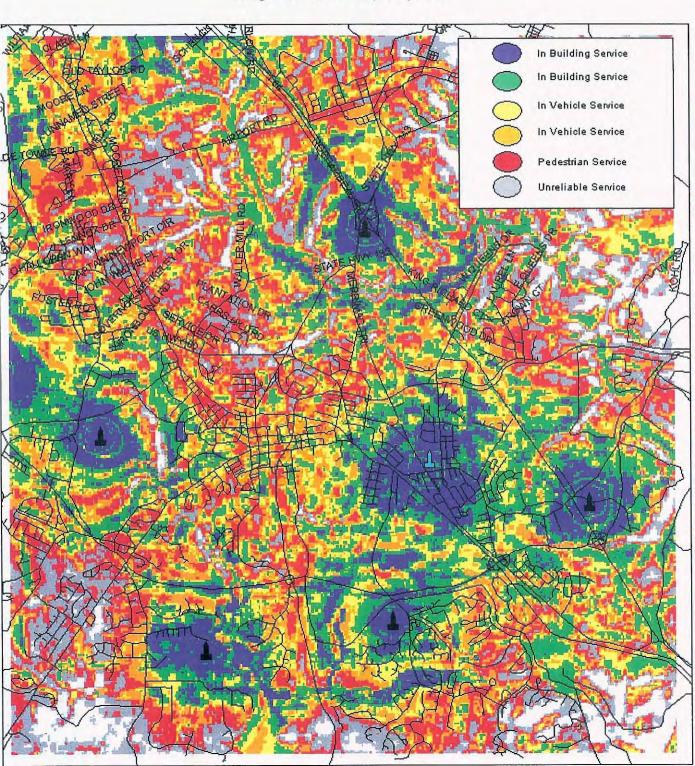


View of balloon from Merrimac Trail/Penniman Road intersection

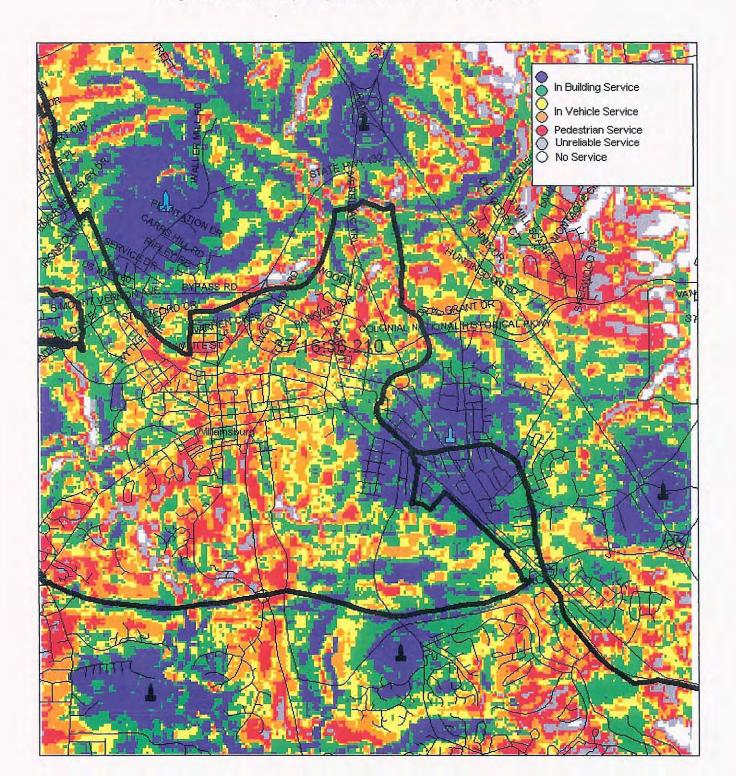
## **Current NTELOS Coverage**



## Anticipated NTELOS Coverage: Magruder School (165') Site



## Anticipated NTELOS Coverage: Magruder School (165') and Waller Mill (165') Sites



### PLANNING COMMISSION COUNTY OF YORK YORKTOWN, VIRGINIA

### Resolution

At a regular meeting of the York County Planning Room, York Hall, Yorktown, Virginia, on the day	
<u>Present</u>	<u>Vote</u>
Alfred E. Ptasznik, Jr., Chair Nicholas F. Barba, Vice Chair Christopher A. Abel Alexander T. Hamilton John W. Staton Anne C. H. Conner John R. Davis	
On motion of, which carried, adopted:  A RESOLUTION TO RECOMMEND APPROUSE PERMIT TO AUTHORIZE A 172-FOO MONOPOLE COMMUNICATIONS TOWER	OVAL OF A SPECIAL T SELF-SUPPORTING

WHEREAS, Richmond 20MHz has submitted Application No. UP-701-06, which requests a Special Use Permit, pursuant to Section 24.1-306 of the York County Zoning Ordinance (Category 17, No. 7), to authorize the establishment of a telecommunications tower up to 172' in height on the Magruder Elementary School campus located at 700 Penniman Road (Route 641) in the northeast quadrant of the intersection of Penniman Road and Merrimac Trail (Route 143) and further identified as Assessor's Parcel No. 10-14-A (GPIN# F14d-4249-0904); and

GROUND-MOUNTED EQUIPMENT AT 700 PENNIMAN ROAD

WHEREAS, said application has been forwarded to the York County Planning Commission in accordance with applicable procedure; and

WHEREAS, the Planning Commission has conducted a duly advertised public hearing on this application; and

WHEREAS, the Commission has carefully considered the public comments with respect to this application; and

WHEREAS, the Commission has determined, pursuant to Section 15.2-2232 of the Code of Virginia, that the proposed communication tower location is substantially in accord with <u>Charting the Course to 2025: The County of York Comprehensive</u> Plan;

NOW, THEREFORE, BE IT RESOLVED by the York County Planning Commission this the \_\_\_\_\_ day of \_\_\_\_\_, 2006 that Application No. UP-701-06 be, and it is hereby, transmitted to the York County Board of Supervisors with a recommendation of approval for a Special Use Permit, pursuant to Section 24.1-306 of the York County Zoning Ordinance (Category 17, No. 7), to authorize the establishment of a telecommunications tower up to 172' in height on the Magruder Elementary School campus located at 700 Penniman Road (Route 641) in the northeast quadrant of the intersection of Penniman Road and Merrimac Trail (Route 143) and further identified as Assessor's Parcel No. 10-14-A (GPIN# F14d-4249-0904), subject to the following conditions:

- 1. This use permit shall authorize the construction of a freestanding monopole communications tower with associated equipment on the parcel of land located at 700 Penniman Road (Route 641) and further identified as Assessor's Parcel No. 10-14-A.
- 2. The height of the tower, including the lightning rod, shall not exceed 172 feet.
- A site plan prepared in accordance with the provisions of Article V of the York 3. County Zoning Ordinance shall be submitted to and approved by the County prior to commencement of land clearing or any construction activity on the subject Except as modified herein, said plan shall be substantially in property. conformance with the sketch plan submitted by the applicant titled "Telecommunications Facility: Magruder School (RMB-5421)", dated 3/23/06 and prepared by JMT Engineering. As part of the site plan submittal, the applicant shall prepare a frequency intermodulation study to determine the impact on current communication transmissions for the York County Departments of Fire and Life Safety and General Services, Sheriff's Office, School Division, and the Intrac Sewer Telemetry System. Should any equipment associated with this facility at any time during the operation of the tower be found by the County to cause interference with County communications, the applicant shall be responsible for the elimination of said interference within twenty-four (24) hours of receipt of notice from the County.
- 4. The tower shall be designed and constructed with antennas located inside the monopole only as depicted on Sheet C3 of the above-referenced sketch plan. No external antenna arrays shall be permitted.
- 5. Construction and operation of the tower shall be in conformance with the performance standards set forth in Sections 24.1-493 and 24.1-494 of the Zoning Ordinance.

- 6. The applicant shall submit to the County a statement from a registered engineer certifying that NIER (nonionizing electromagnetic radiation) emitted from the tower does not result in a ground level exposure at any point outside such facility that exceeds the maximum applicable exposure standards established by any regulatory agency of the U.S. Government or the American National Standards Institute.
- 7. A report from a registered structural or civil engineer shall be submitted indicating tower height and design, structure installation, and total anticipated capacity of the structure (including number and types of users that the structure can accommodate). These data shall satisfactorily demonstrate that the proposed tower conforms to all structural requirements of the Uniform Statewide Building Code and shall set out whether the tower will meet the structural requirement of EIA-222E, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures."
- 8. The access easement shown on the above referenced sketch plan shall be established for the benefit of tower users for purposes of ingress, egress, and installation and maintenance of utilities associated with the proposed telecommunications facility prior to site plan approval.
- 9. Advertising and signage on the tower shall be expressly prohibited, except for warning signs associated with the operation of the tower or its equipment.
- 10. Prior to site plan approval, the applicant shall submit written statements from the Federal Aviation Administration, Federal Communications Commission, and any other review authority with jurisdiction over the tower, stating that the proposed tower complies with regulations administered by that agency or that the tower is exempt from those regulations.
- 11. If at any time use of the communications tower ceases, the owner of the subject property on which the tower is located shall dismantle and remove it within six (6) months after ceasing to use it, unless:
  - (1) A binding lease agreement or letter of intent with another wireless communications provider has been executed in which case an additional six (6) months shall be granted. If a letter of intent is provided, the execution date for a binding lease agreement shall not extend more than (12) months beyond the time the use of the tower ceases, or
  - (2) The County requests, in writing, that the tower be reserved for County use.
- 12. Accessory facilities shall not include offices, vehicle storage, or outdoor storage unless permitted by the district regulations.

- 13. Evidence shall be provided prior to receipt of a building permit that the Virginia State Corporation Commission has been notified that a communication facility is to be constructed.
- 14. The proposed 8-foot chain link fence surrounding the facility shall be outfitted with opaque material deemed acceptable for screening purposes by the Zoning Administrator.
- 15. The compound shall be covered with netting designed to prevent recreational equipment (baseballs, softballs, etc.) from entering the compound.
- 16. The communication tower shall be gray in color. Should Federal Aviation Administration requirements dictate special markings, tower lighting shall be used in lieu of multi-color painting. If painting is required, a tower maintenance plan shall be submitted to and approved by the County.
- 17. No microwave dishes, conical shaped antennae, or other dish shall be permitted on the tower.
- 18. The communications tower shall be structurally designed to accommodate no fewer than three (3) wireless users capable of supporting either PCS or cellular antenna arrays. If space is available, the County shall have the right of first refusal for leasing a space on the tower to place an antenna in support of operations consistent with the County's Department of Fire and Life Safety.
- 19. In accordance with Section 24.1-115(b)(7) of the York County Zoning Ordinance, a certified copy of the resolution authorizing this Special Use Permit shall be recorded at the expense of the applicant in the name of the property owner as grantor in the office of the Clerk of the Circuit Court prior to application for site plan approval.

BE IT FURTHER RESOLVED that this Special Use Permit is not severable, and invalidation of any word, phrase, clause, sentence, or paragraph shall invalidate the remainder.